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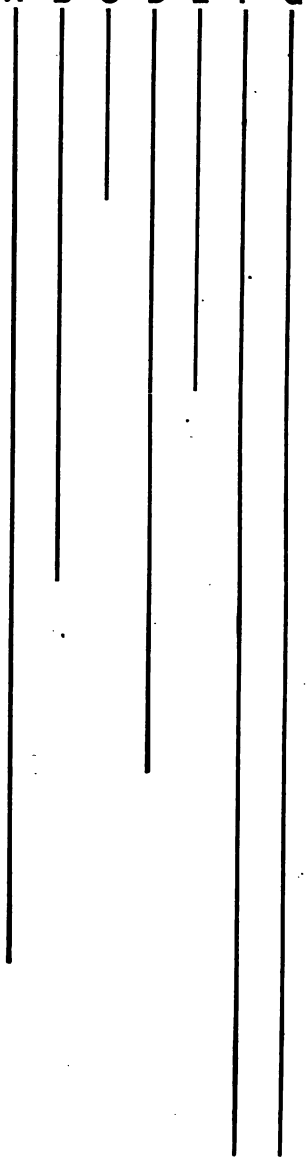

1. How many inches long are the two lines F and G together?

2. How many inches are there in a foot?

3. How many times the line G equals a foot? The line G equals what part of a foot?

4. How many inches are there in one-half of a foot?

5. The line G, the line A, and which other line together make a foot?

6. The line B, the line D, and which other line together make a foot?

7. The line B, the line F, the line E, and which other line together make a foot?

8. How many times the line B equals a foot? The line B equals what part of a foot?

9. How many inches are there in one-fourth of a foot?

10. How many times the line D equals a foot? The line D equals what part of a foot?

11. How many inches are there in one-third of a foot?

12. Which three lines together equal one foot?

1. Measure and find how many feet wide the cloak-room of your schoolroom is. How many feet long?

2. A yard stick is 3 feet long. How many yards long is the cloak room of your schoolroom?

3. If a strip of carpet were laid from the door to the teacher's desk, how many feet long would it be? How many yards long?

4. How long, in feet and inches, would a flower box have to be to cover the longest window sill in your schoolroom?

5. How many whole feet is the lower edge of the blackboard, in your schoolroom, above the floor? How many feet and inches? How many inches?

6. How many feet is the lowest hat hook, in the cloak room, from the floor? How many feet and inches? How many inches?

7. Place a mark on the blackboard as high as the top of your head is from the floor. How tall are you, in feet and inches? In inches?

8. Place a mark on the blackboard as high as you can reach. How many feet and inches is it from the floor? How many inches?

9. With a piece of chalk in each hand, make two marks upon the blackboard at the same time, as far apart as you can reach. Tell, without measuring, how far you think the marks are apart. Measure, and tell the difference between your first answer and the correct one.

10. Copy on a separate sheet, filling the blanks:

TABLE

..... inches make 1 foot.
..... feet make 1 yard.
..... inches make 1 yard.

EXERCISES ON TWOS AND THREES

Read the lines across the page, giving answers. Then read and answer the questions from the top downward.

2× 4, or 4×2 = ?	$\frac{1}{2}$ of 8, or 8÷2 = ?	$\frac{1}{4}$ of 8, or 8÷ 4 = ?
2× 3, or 3×2 = ?	$\frac{1}{2}$ of 6, or 6÷2 = ?	$\frac{1}{3}$ of 6, or 6÷ 3 = ?
2× 2 = ?	$\frac{1}{2}$ of 4, or 4÷2 = ?	.....
2× 5, or 5×2 = ?	$\frac{1}{2}$ of 10, or 10÷2 = ?	$\frac{1}{5}$ of 10, or 10÷ 5 = ?
2× 8, or 8×2 = ?	$\frac{1}{2}$ of 16, or 16÷2 = ?	$\frac{1}{8}$ of 16, or 16÷ 8 = ?
2× 6, or 6×2 = ?	$\frac{1}{2}$ of 12, or 12÷2 = ?	$\frac{1}{6}$ of 12, or 12÷ 6 = ?
2× 9, or 9×2 = ?	$\frac{1}{2}$ of 18, or 18÷2 = ?	$\frac{1}{9}$ of 18, or 18÷ 9 = ?
2× 7, or 7×2 = ?	$\frac{1}{2}$ of 14, or 14÷2 = ?	$\frac{1}{7}$ of 14, or 14÷ 7 = ?
2×11, or 11×2 = ?	$\frac{1}{2}$ of 22, or 22÷2 = ?	$\frac{1}{11}$ of 22, or 22÷11 = ?
2×10, or 10×2 = ?	$\frac{1}{2}$ of 20, or 20÷2 = ?	$\frac{1}{10}$ of 20, or 20÷10 = ?
2×12, or 12×2 = ?	$\frac{1}{2}$ of 24, or 24÷2 = ?	$\frac{1}{12}$ of 24, or 24÷12 = ?
2× 1, or 1×2 = ?	$\frac{1}{2}$ of 2, or 2÷2 = ?	.....
3× 2, or 2×3 = ?	$\frac{1}{3}$ of 6, or 6÷3 = ?	$\frac{1}{2}$ of 6, or 6÷ 2 = ?
3× 4, or 4×3 = ?	$\frac{1}{3}$ of 12, or 12÷3 = ?	$\frac{1}{4}$ of 12, or 12÷ 4 = ?
3× 6, or 6×3 = ?	$\frac{1}{3}$ of 18, or 18÷3 = ?	$\frac{1}{6}$ of 18, or 18÷ 6 = ?
3× 8, or 8×3 = ?	$\frac{1}{3}$ of 24, or 24÷3 = ?	$\frac{1}{8}$ of 24, or 24÷ 8 = ?
3×10, or 10×3 = ?	$\frac{1}{3}$ of 30, or 30÷3 = ?	$\frac{1}{10}$ of 30, or 30÷10 = ?
3×12, or 12×3 = ?	$\frac{1}{3}$ of 36, or 36÷3 = ?	$\frac{1}{12}$ of 36, or 36÷12 = ?
3× 3 = ?	$\frac{1}{3}$ of 9, or 9÷3 = ?	.....
3× 5, or 5×3 = ?	$\frac{1}{3}$ of 15, or 15÷3 = ?	$\frac{1}{5}$ of 15, or 15÷ 5 = ?
3× 7, or 7×3 = ?	$\frac{1}{3}$ of 21, or 21÷3 = ?	$\frac{1}{7}$ of 21, or 21÷ 7 = ?
3× 9, or 9×3 = ?	$\frac{1}{3}$ of 27, or 27÷3 = ?	$\frac{1}{9}$ of 27, or 27÷ 9 = ?
3×11, or 11×3 = ?	$\frac{1}{3}$ of 33, or 33÷3 = ?	$\frac{1}{11}$ of 33, or 33÷11 = ?
3× 1, or 1×3 = ?	$\frac{1}{3}$ of 3, or 3÷3 = ?	.....

Pupils may return to this page from time to time and drill briefly upon the facts given here, until they are fully mastered.

1. A tablet cost 25 cents and a reader 50 cents. Find the cost of both.

25
50

How many dimes and cents in the sum?

2. I sold a peck of apples for 25 cents and a cake for 23 cents. How much did I receive?

25
23

How many dimes and cents in the sum?

3. What is the cost of a dozen eggs at 26 cents and one pound of flour at 3 cents?

26
3

How many dimes and cents in the sum?

4. What must I pay for a tablet at 6 cents and a pencil at 5 cents?

6
5

Eleven cents equals how many dimes and cents?

5. What is the cost of a pound of butter at 26 cents and a peck of apples at 15 cents?

26
15

26¢ equals how many dimes and how many cents? 15¢ equals how many dimes and how many cents? 26¢ + 15¢ =?

6. Write in figures and answer:

1 ten and 6 + 1 ten and 4 =?
1 ten and 8 + 1 ten and 3 =?
1 ten and 7 + 1 ten and 6 =?
2 tens and 9 + 1 ten and 5 =?
5 tens and 5 + 3 tens and 7 =?

7. Read the following as ones, and as tens and ones: 21, 32, 56, 49, 64, 73, 78, 87, 89, and 91.

8. Add:

16 inches		18¢	13 pounds		16 bushels	
12 inches		11¢	14 pounds		13 bushels	
20	22	21	56	58	51	64
13	11	18	42	31	27	54

1. A gardener set out 4 rows of trees, putting 82 trees in each row. How many trees did he set out?

2. If a person pays $4 a week for board, how much will he pay in a year, or fifty-two weeks?

3. There are twenty-four sheets of paper in a quire. How many sheets are there in five quires?

4. How many bushels of wheat are there in ninety-six bags, if each bag contains two bushels?

5. What will three pianos cost at $285 each?

6. A family uses thirty-eight quarts of milk in a month. How much will the milk bill amount to for a month at 5 cents a quart?

7. Multiply:

438	147	235	268	470	138	167	295
2	5	4	3	2	5	4	2
179	489	249	304	169	230	294	157
3	2	4	3	5	4	3	5

8. There are one hundred ninety-six pounds of flour in a barrel. How many pounds in four barrels?

9. Mr. Gates sold a horse for $87. I sold one for three times as much. How much did I receive?

10. If Mr. Field pays $36 for one month's rent, what will his rent be for five months?

11. One hundred ninety-six loaves of bread can be made from a barrel of flour. How many loaves can be made from five barrels of flour?

12. Dr. Allen pays $55 a year for his telephone. What will it cost him for four years?

13. At 5¢ each, what will 2 dozen crayon pencils cost? What will 28 such pencils cost?

1. Two boys bought the following articles to complete their camping outfit:

Two blankets at 75¢ each.

A frying-pan, a pail, and a coffee-pot, at 27¢ each.

Six yards of mosquito-netting at 5¢ a yard.

Two large boxes at 35¢ each.

Find (1) the cost of the blankets; (2) of the cooking-dishes; (3) of the netting; (4) of the boxes. How much did they pay for all?

2. Alice and Jane gave a party for which they bought the following:

Five pounds of candy at 38¢ a pound.

Four pounds of mixed nuts at 18¢ a pound.

Three quarts of ice-cream at 40¢ a quart.

Two cakes at 50¢ each.

Find the cost of (1) the candy; (2) the nuts; (3) the ice-cream; (4) the cakes; (5) all together.

3. John made for his sister a play house out of 4 large store boxes, each costing 15¢. They bought for the house:

Five yards of curtain calico at 3¢ a yard.

Three doll chairs at 13¢ each.

A small table at 25¢.

Find the cost of (1) the boxes; (2) the calico; (3) the chairs. How much did they spend for all?

4. Henry carried papers 178 days each year for 3 years. How many days did he carry papers in the 3 years? At 5 papers daily, how many did he deliver?

5. Herman bought 184 pigeons one year and the next year he sold 3 times as many. How many pigeons did he sell?

1. Mrs. Smith divided 32¢ equally between her two little girls. How much did each receive?

$2)\underline{32} = 20 + 12 = 32$

$\underline{\quad\quad\quad\quad} \qquad 10 + 6 = 16$

$\frac{1}{2}$ of 3 tens equals how many tens and how many over? One ten + 2 ones equals how many ones? $\frac{1}{2}$ of 12 ones = ?

$2)\underline{32}$

$\underline{16}$

$\frac{1}{2}$ of 32, or 32 divided by 2 = ?

2. $2)\underline{54}$ $2)\underline{38}$ $2)\underline{56}$ $2)\underline{34}$ $2)\underline{36}$ $2)\underline{58}$

3. How many 2's, and how many ones over, in 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, and 19?

4. How many 3's, and how many ones over, in 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, and 23?

5. How many 4's, and how many ones over, in 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, and 36?

6. How many 5's, and how many ones over, in 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, and 39?

7. Seventy-five apples are separated into 3 equal piles. How many are there in each pile?

$3)\underline{75}$

How many 3's in 7? How many over? What is this 1? How many ones equal 1 ten and 5 ones? How many 3's in 15? How many 3's in 75?

8. There are 54 books in a case of 3 shelves, the same number on each shelf. How many are on each shelf?

9. $3)\underline{48}$ $3)\underline{78}$ $3)\underline{81}$ $3)\underline{84}$ $3)\underline{243}$ $3)\underline{144}$

$4)\underline{96}$ $4)\underline{84}$ $4)\underline{72}$ $4)\underline{64}$ $4)\underline{184}$ $4)\underline{364}$

Answer all you can orally.

1. Review page 20 as oral work.

2. In a 5-gallon can, how many quarts are there? How many pints? How many gills?

3. A milk-man started in the morning with 100 quarts of milk. How many pints did he have? How many gallons?

4. There are 8 people in a family and each one drinks $\frac{1}{2}$ a pint of milk. How many pints do they drink? How many quarts?

5. From a jar containing 2 gallons of mineral water, 6 pints were taken. How many pints were left? How many quarts?

6. How many bottles holding 2 quarts each can be filled from 20 gallons?

7. A lamp burns a quart of oil every 24 hours. How many quarts are used in 32 days? How many gallons?

8. A milk-man had 176 quarts of milk. How many gallons did he have?

9. How many gill cups can be filled from 2 quarts and 1 pint of vinegar? From 5 gallons?

10. There are $31\frac{1}{2}$ gallons in a barrel. How many gallons are there in 4 barrels? In 6 barrels? In 8 barrels? 3 barrels? 5 barrels?

11. How many quarts are there in a barrel?

12. From a barrel of gasoline how many cans may be filled if each holds 3 quarts? How many if each holds $\frac{1}{2}$ a gallon? $1\frac{1}{2}$ gallons?

13. A milk-man starts in the morning with 48 gallons of milk. How many customers can he serve if each takes 3 quarts? How many, if each takes 2 quarts? If each takes 3 pints?

1. Review page 28 as oral work.

2. Write one dollar as it is written in business.

3. In the same way write 2 dollars; 3 dollars; 5 dollars.

4. Write 50 cents in all the ways you can.

5. Write $1 and 50 cents, without using the word "cents."

6. Write 2 dollars and twenty-five cents; 7 dollars and 10 cents; ten dollars and 75 cents; twelve dollars and fifteen cents.

7. Write $1 and 5 cents. Where is the 5 written? Why? In what way is the first column to the right of the point to be filled?

8. Write $8 and 9 cents; $3 and 1 cent; $17 and 6 cents.

9. When there are no cents how is the cents' column to be filled? Write $1, five dimes, and 1 cent. Read it.

10. Write $1 and 25 cents. Take away the dollar. What is left?

11. Write 25 cents as in problem 10. Write 17 cents; seventy-five cents; 4 cents; 40 cents.

12. Read:

$5.01	$9.10	$7.09	$10.20	$36.50	$30.03
$8.02	$4.15	$9.13	$43.75	$84.62	$13.40

13. Read, $.40, $.16, $.35, $.50, $.07, $.10, $.09.

14. Write in figures:

Nine dollars and twenty-five cents; forty dollars.
Twenty-six dollars and six cents; fourteen cents.
Ninety dollars and ninety cents; seven cents.
Thirty dollars and five cents; one hundred dollars.
Seventy-five dollars and seventy-five cents.
Eighty dollars and 9 cents.
Sixty-one dollars and 1 cent.

1. What is the perimeter of an 11-inch square?

2. What is the area of an 11-inch square?

3. Three loads of hay will winter one cow. How many cows will 33 loads winter?

4. How many inches in 3 feet? In 5 feet? In 7 feet? In 11 feet?

5. How many square inches in a rectangle that is 11 inches long and 3 inches wide? 11 inches long and 5 inches wide? 11 inches long and 7 inches wide? 11 inches long and 9 inches wide? 11 inches wide and 12 inches long?

6. How many days in 11 weeks and 4 days?

7. Find the cost of one-eleventh of 55 pounds of sugar at 6¢ a pound.

8. What is the cost of three-elevenths of 99 cords of wood at $5 a cord?

9. Find the cost of one-eleventh of 22 sheep at $7 each. Of three-elevenths at $9 each.

10. I paid $110 house rent and one-eleventh as much for gas. How much did I pay for both?

11. Isaac planted 88 seeds in 11 hills. How many seeds did he put in one hill?

12. How many square inches in the top of a mantel that is 11 inches wide and 48 inches long?

13. All but one-eleventh of $99 was divided among 3 people. How much did each receive?

14. How many feet of ribbon will be required to bind a portfolio that is 11 inches square, allowing 4 inches extra for corners? How many yards?

15. What is the perimeter of a rectangle 7 by 11 inches? What is the area?